Office européen des brevets

EP 0 717 446 A3

(12)

## **EUROPEAN PATENT APPLICATION**

- (88) Date of publication A3:
  - (51) Int. Cl.<sup>6</sup>: H01L 27/15 02.06.1999 Builetin 1999/22
- (43) Date of publication A2: 19.06.1996 Bulletin 1996/25
- (21) Application number: 95119100.6
- (22) Date of filing: 05.12.1995
- (84) Designated Contracting States: **DE FR GB**
- (30) Priority: 14.12.1994 US 355742
- (71) Applicant: EASTMAN KODAK COMPANY Rochester, New York 14650 (US)
- (72) Inventors: Tang, Ching Wan, c/o Eastman Kodak Company Rochester, New York 14650-2201 (US)
- Hseih, Biay Cheng, c/o Eastman Kodak Company Rochester, New York 14650-2201 (US)
- (74) Representative: Reichert, Werner F., Dr. rer.nat., Dipl.-Phys. Kodak Aktiengesellschaft, **Patent Department** 70323 Stuttgart (DE)

## TFT-EL display panel using organic electroluminiscent media (54)

A flat panel display comprising thin-film-transis-(57)tor-electroluminescent (TFT-EL) pixels is described. An addressing scheme incorporating two TFTs and a storage capacitor is used to enable the EL pixels on the panel to operate at a duty factor close to 100%. This TFT-EL device eliminates the need to pattern the EL

cathode, thus greatly simplifying the procedure to delineate the EL pixels as well as ensuring high resolution. The TFT-EL panel consumes less power than conventional TFT-LCD panels, especially when the usage factor of the screen is less than unity.

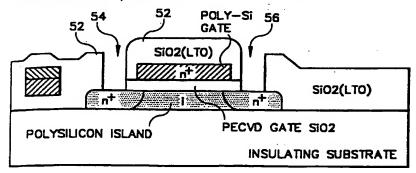


FIG. 5



## **EUROPEAN SEARCH REPORT**

**Application Number** EP 95 11 9100

Category	Citation of document with in	dication, where appropriate,	Relevant	CLASSIFICATION OF THE
Category	of relevant pass		to claim	APPLICATION (Int.Cl.6)
A	PATENT ABSTRACTS OF vol. 095, no. 002, -& JP 06 325869 A CORP), 25 November * abstract *	31 March 1995 (MITSUBISHI KASEI	1	H01L27/15 G09G3/32
D,A	US 4 042 854 A (LUO 16 August 1977 * abstract; figures		1	
A	EP 0 365 445 A (EAS 25 April 1990 * abstract; figures		1	
D,A	EP 0 553 496 A (EAS' 4 August 1993 * abstract; figures		1	
				TECHNICAL FIELDS SEARCHED (Int.Cl.6)
				H01L G09G
	The present search report has b	een drawn up for all claims		
	Place of search THE HAGUE	Date of completion of the season 14 April 1999		Exeminer Laere, A
X : parti Y : parti docu A : tech O : non-	ATEGORY OF CITED DOCUMENTS cularly relevant if taken alone cularly relevant if combined with anoth ment of the same category nological background written disclosure mediate document	T : theory or pr E : earlier pate after the fill D : document c L : document c	inciple underlying the nt document, but publi ng date cited in the application ited for other reasons	invention ished on, or

EPO FORM 1503 03.82 (PO4C01)

## ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 95 11 9100

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

14-04-1999

Patent document cited in search report		Publication date	Patent family member(s)		Publication date	
US	4042854	<b>A</b>	16-08-1977	DE FR GB JP NL US	2652296 A 2332585 A 1563243 A 52064891 A 7612128 A 4135959 A	26-05-197 17-06-197 19-03-198 28-05-197 24-05-197 23-01-197
EP	0365445	A	25-04-1990	US DE DE JP JP	4996523 A 68914389 D 68914389 T 2148687 A 2729089 B	26-02-199 11-05-199 13-10-199 07-06-199 18-03-199
EP	0553496	A .	04-08-1993	US CA DE DE JP	5276380 A 2085298 A 69217475 D 69217475 T 5275172 A	04-01-199 01-07-199 27-03-199 28-08-199 22-10-199
	·					
				•		·
					••	

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82